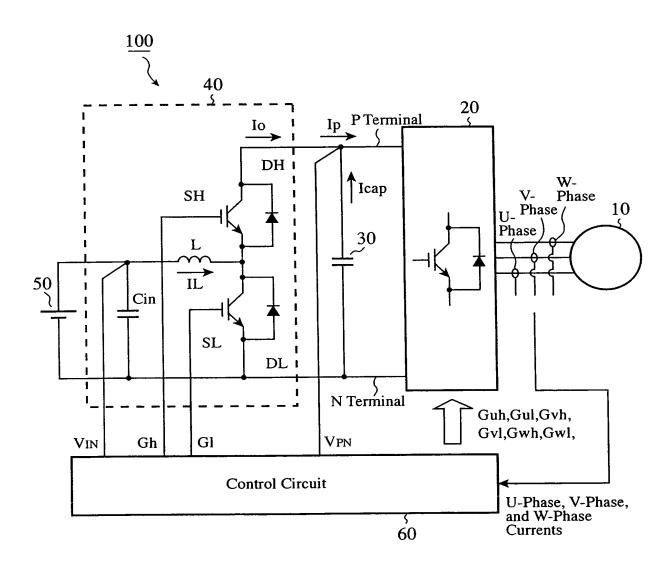
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FIG.1



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FIG.2

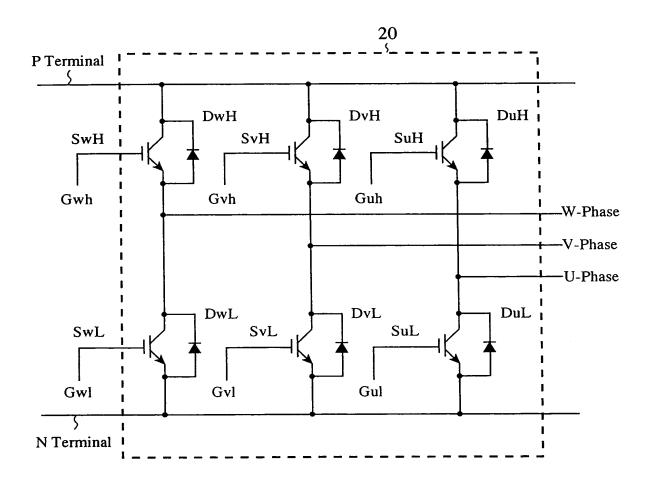


FIG.3

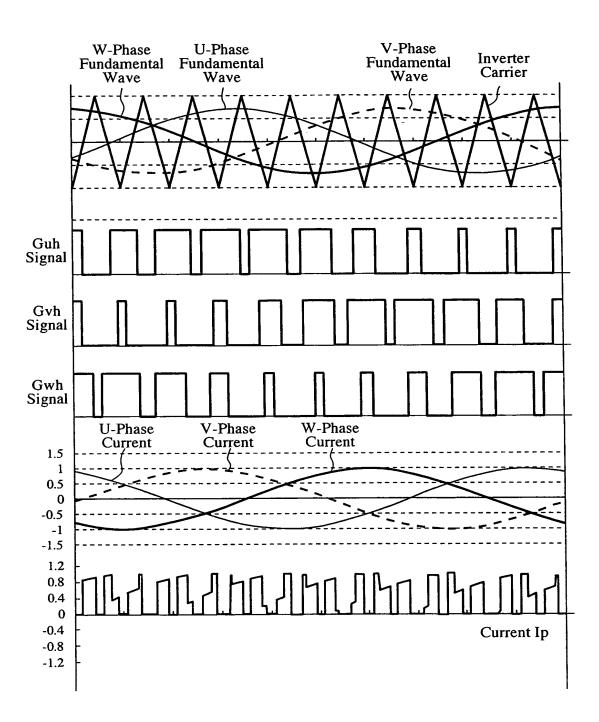
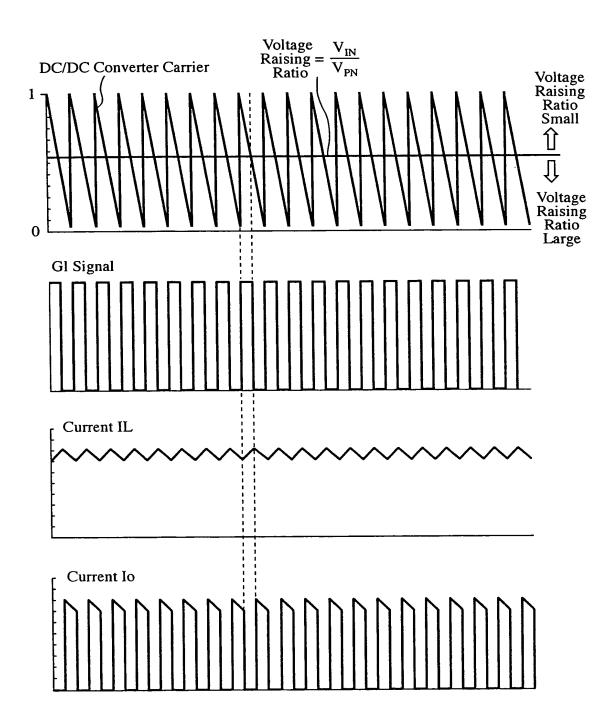
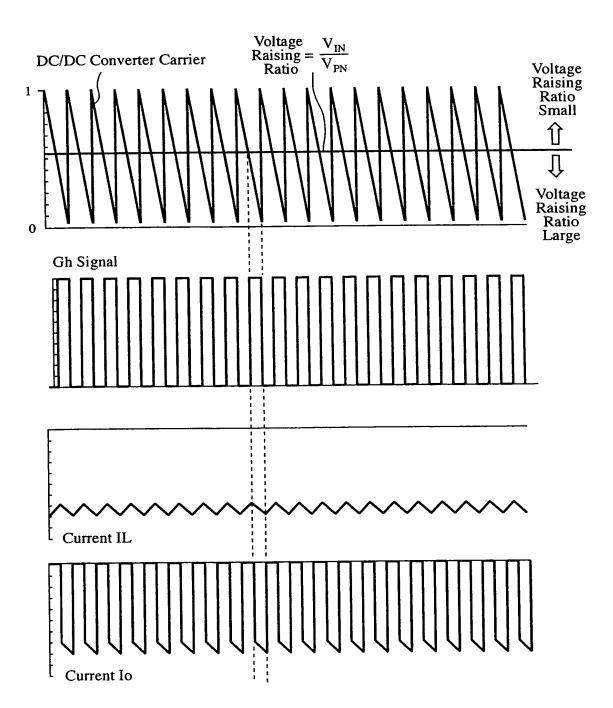


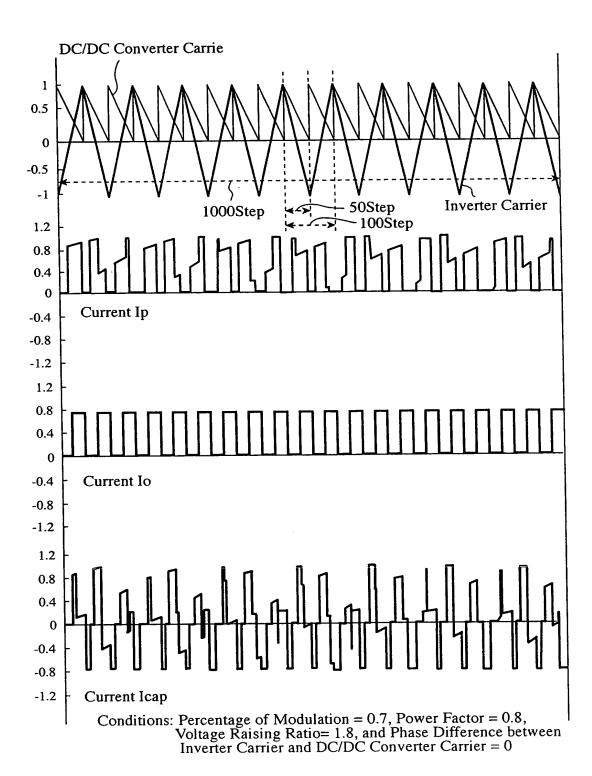
FIG.4

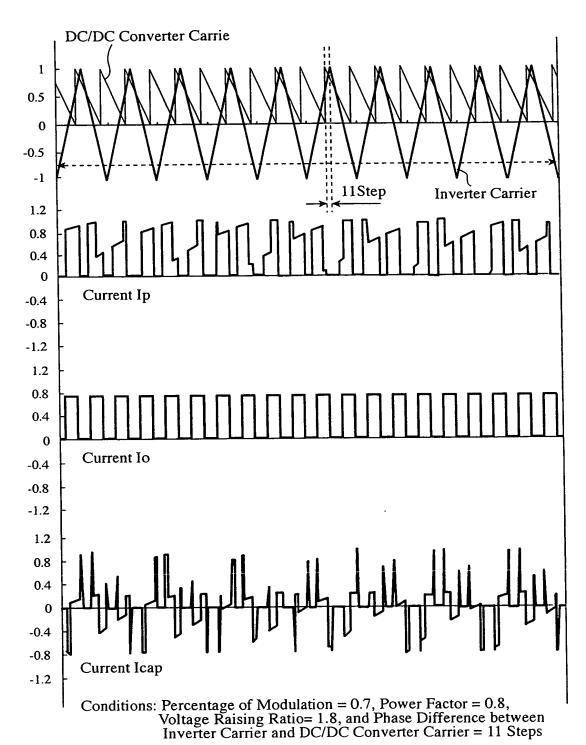


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FIG.8

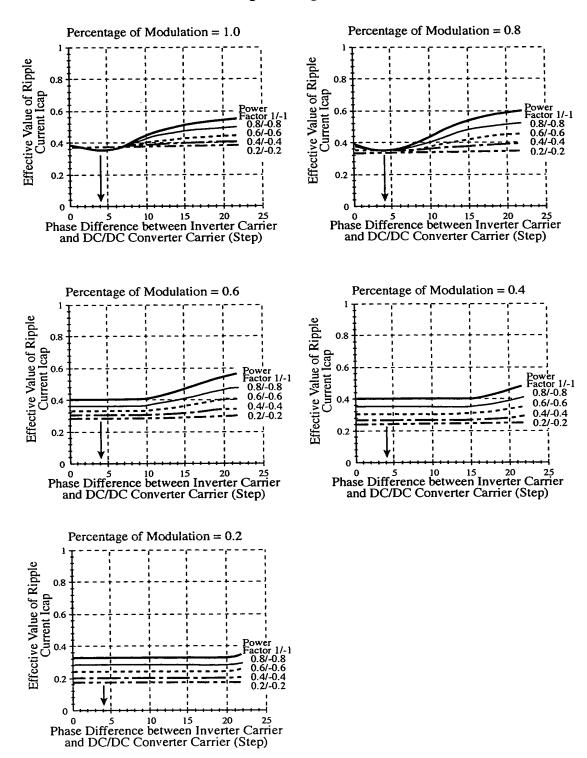
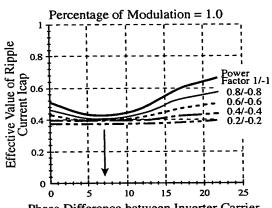
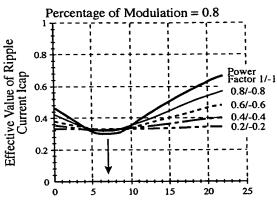


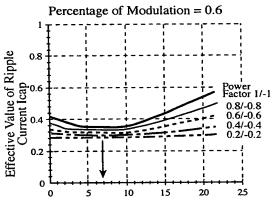
FIG.9



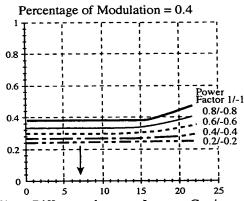
Phase Difference between Inverter Carrier and DC/DC Converter Carrier (Step)



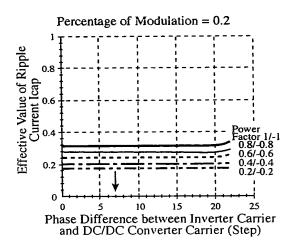
Phase Difference between Inverter Carrier and DC/DC Converter Carrier (Step)



Phase Difference between Inverter Carrier and DC/DC Converter Carrier (Step)

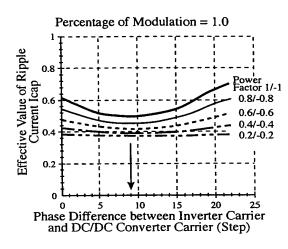


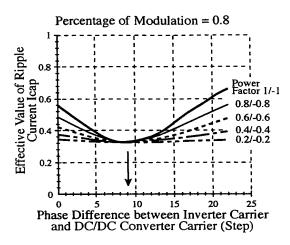
Phase Difference between Inverter Carrier and DC/DC Converter Carrier (Step)

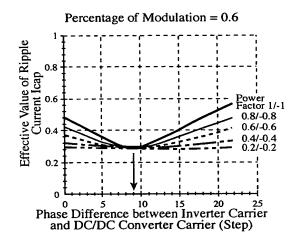


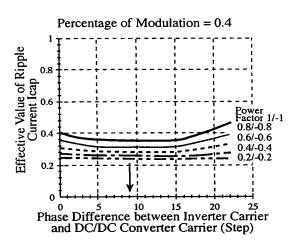
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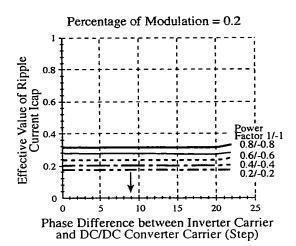
FIG.10





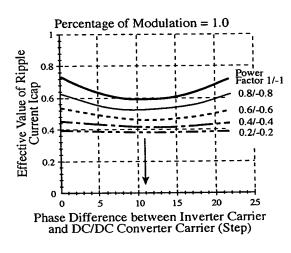


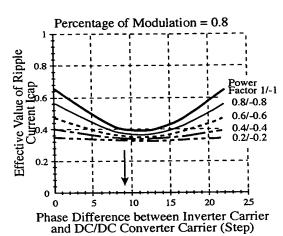


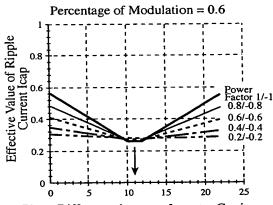


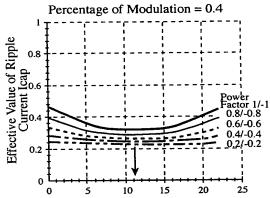
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FIG.11



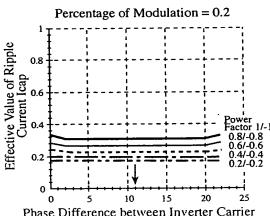






Phase Difference between Inverter Carrier and DC/DC Converter Carrier (Step)

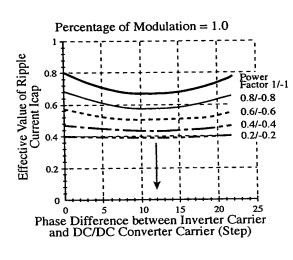
Phase Difference between Inverter Carrier and DC/DC Converter Carrier (Step)

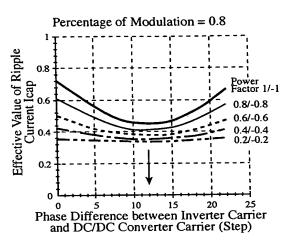


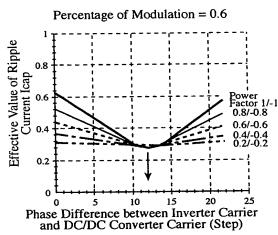
Phase Difference between Inverter Carrier and DC/DC Converter Carrier (Step)

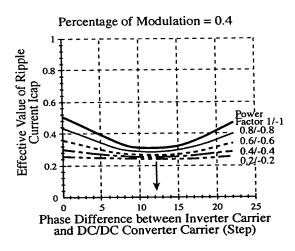
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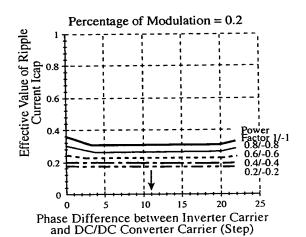
FIG.12





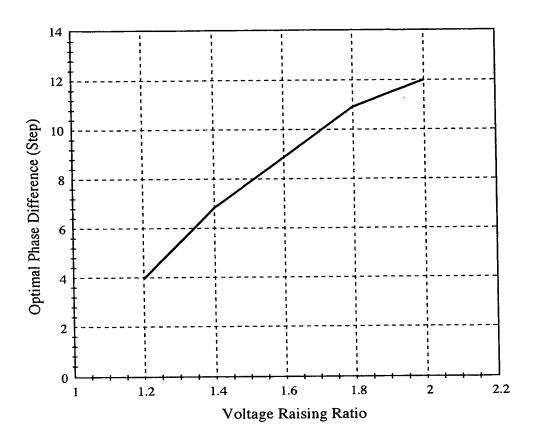






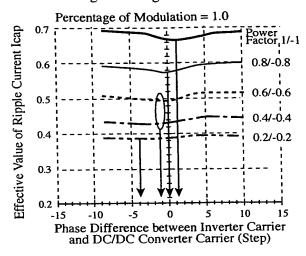
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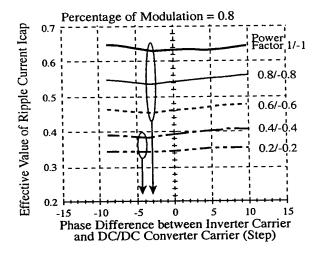
FIG.13

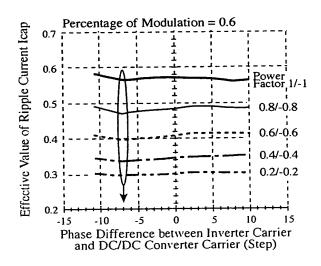


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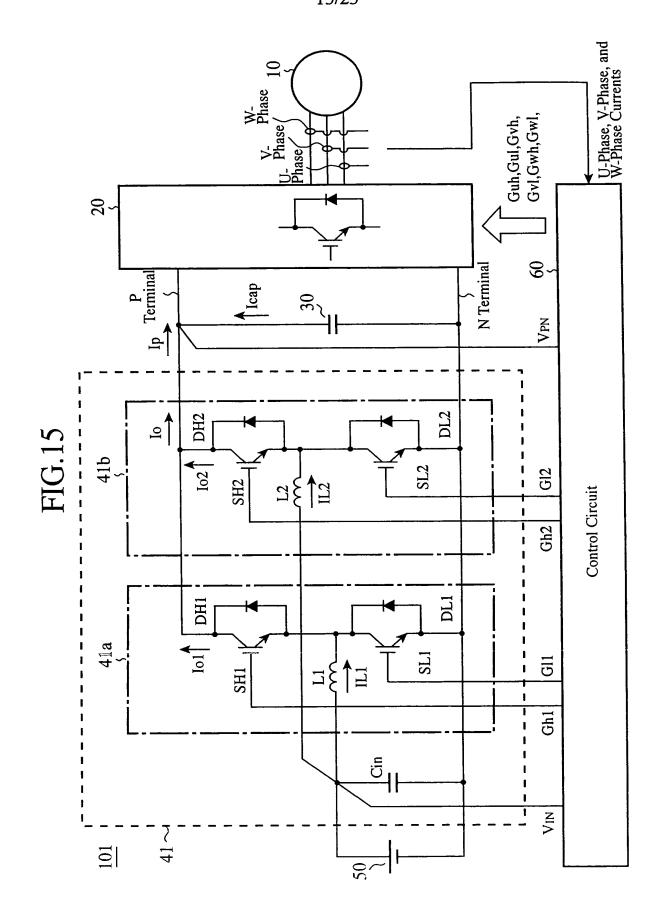
FIG.14

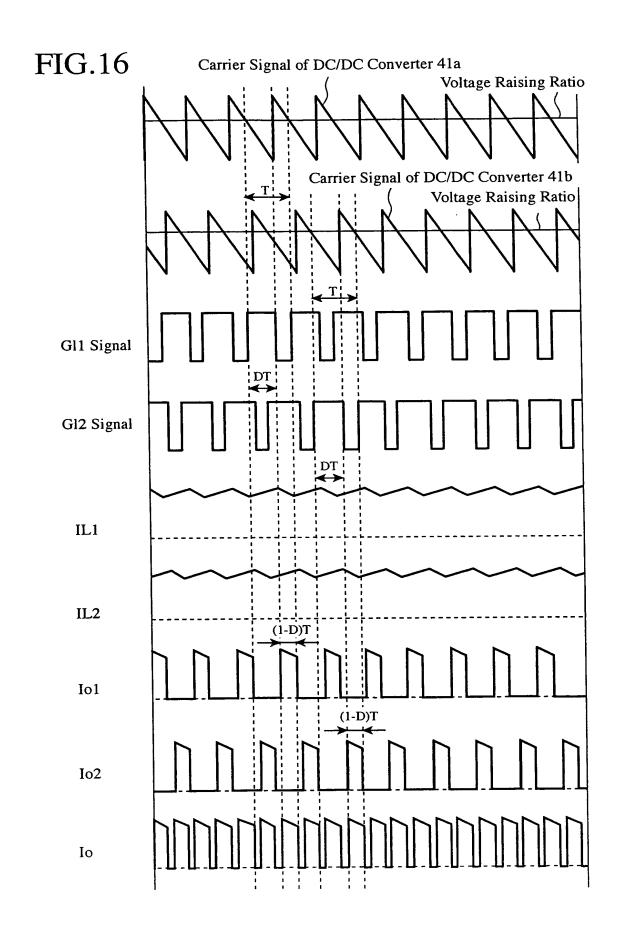






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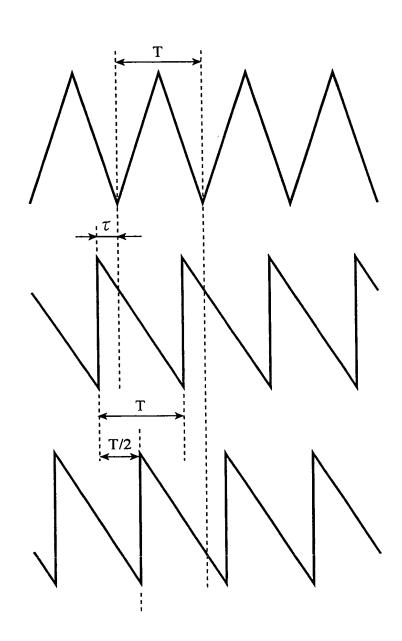
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FIG.17

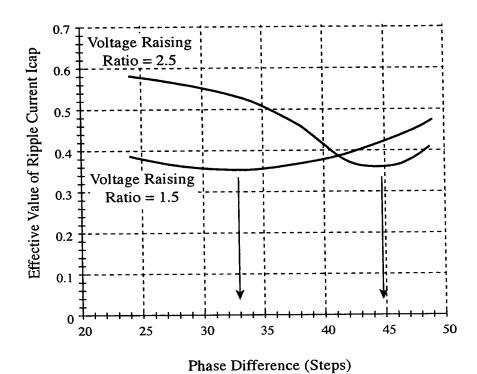
Carrier Signal of Inverter 20

Carrier Signal of DC/DC Converter 41a

Carrier Signal of DC/DC Converter 41b

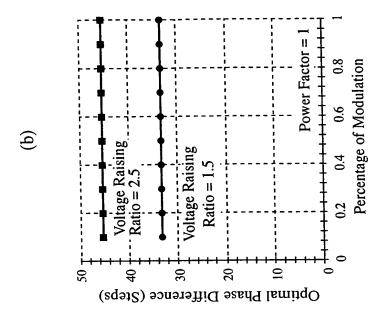


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(a)



Voltage Raising Ratio = 1.5

Optimal Phase Difference (Steps)

Voltage Raising Ratio = 2.5

50 T

Percentage of Modulation = 1

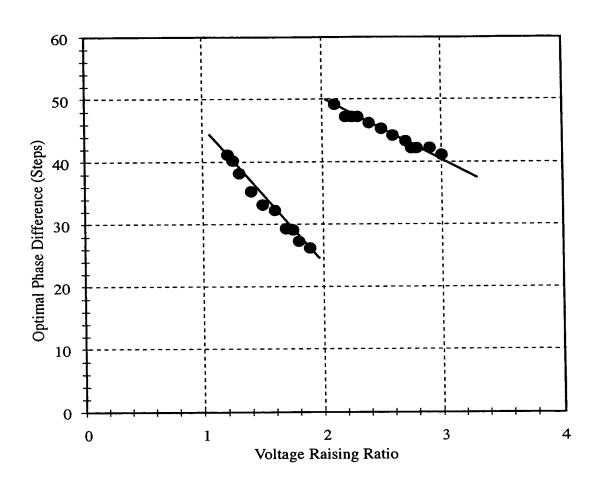
Power Factor

0.4

0.2

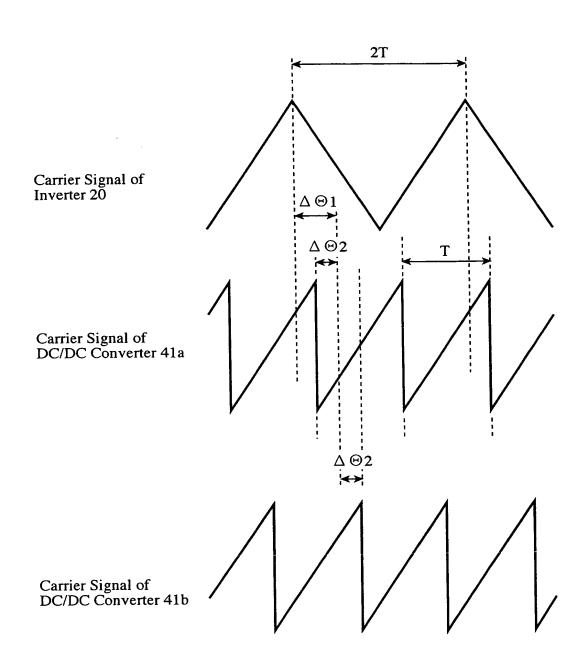
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FIG.20

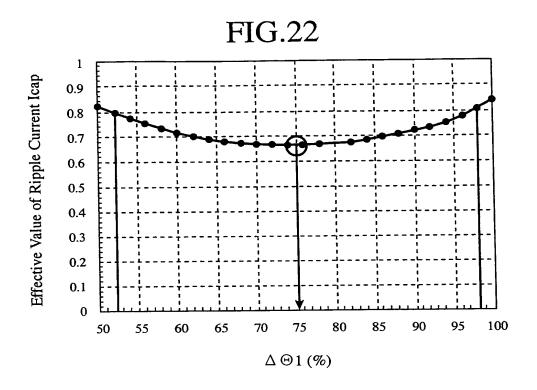


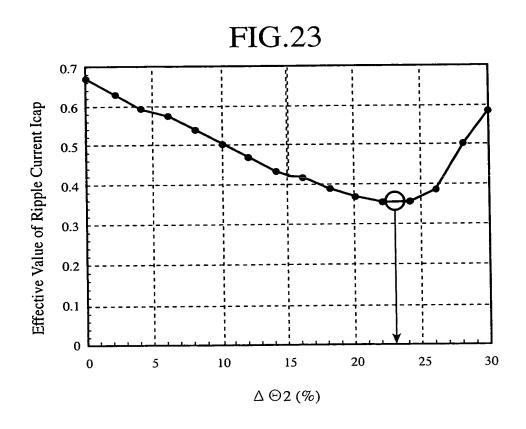
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FIG.21

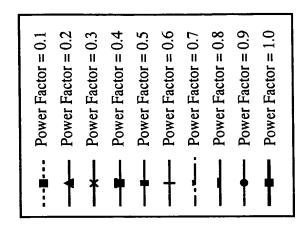


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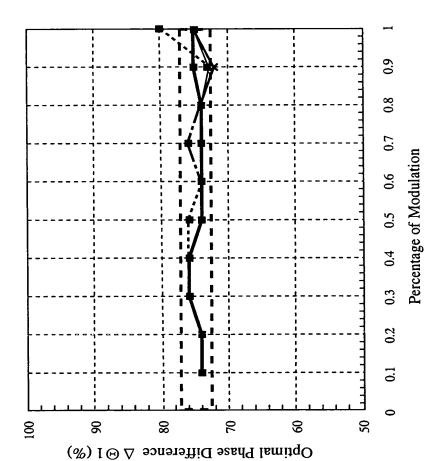


FIG.24

Power Factor = 0.6

Power Factor = 0.2 Power Factor = 0.3

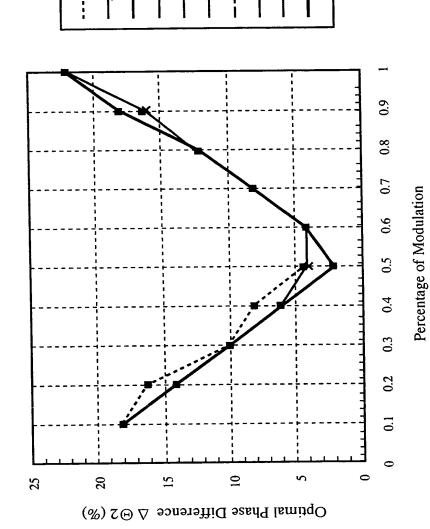
Power Factor = 0.1

Power Factor = 0.4 Power Factor = 0.5 Power Factor = 0.9 Power Factor = 1.0

Power Factor = 0.8

• Power Factor = 0.7





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